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EXAMINER

LEE, CHRISTOPHER E

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 06/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/540,676

Applicant(s)

CLINE, LESLIE E.

Examiner

Christopher E. Lee

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2181

## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "pull-down resistor coupled to a switch" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Note reference sign 920 on page 17, line 20 and page 18, lines 10 and 22.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

a) Note reference signs 110,112,114,118,122,144,148,162,164,166,170,174,176 and 178 in Fig. 1

b) Note reference sign 210 in Fig. 2

c) Note reference signs 550,520,542,552 and 556 in Fig. 5

d) Note reference signs 620,650,652 and 656 in Fig. 6

e) Note reference signs 732,734,744,746,748,752,754,756 and 758 in Fig. 7

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 2181

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "732" in Fig. 8 has been used to designate both pull-up resistor on TPA and pull-up resistor on TPA\*. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

6. The disclosure is objected to because of the following informalities:

- a) The term "power switch 510" should be changed to --power switch 512--.
- b) In page 16, lines 9 and 12, the drawing reference sign 742 is not the pull-up resistor, but the port status receiver in Fig. 8.

Appropriate correction is required.

***Claim Objections***

7. Claims 16-18 are objected to because of the following informalities:

Even if those claims are not method claims, they recite "The method of claim 15" in their preambles. Substitute "The method of claim 15" by --The apparatus of claim 15--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 2 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2181

In regard of claim 2, the specification does not disclose a method, wherein said first resistor could be configured as a pull-down resistor.

In regard of claim 16, the specification does not disclose an apparatus, wherein said first resistor could be configured as a pull-down resistor.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 8-11 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al. [USPN 6,131,134].

Referring to claim 8, Huang et al. disclose an apparatus, comprising: a first resistor with a first end and a second end (pull-up resistor 340 of Fig. 3); a switch (switch 330 of Fig. 3) coupled to said first end of said first resistor and a bias voltage (3.3V in Fig. 3); a detach control signal wire (switch controlling signal arrow from converting circuit 310 to switch 330 in Fig. 3) coupled to said switch; and a data bus wire (USB interface D+ of Fig. 3) coupled to said second end of said first resistor.

Referring to claim 1, the method steps of claim 1 are inherently performed by the apparatus of claim 8, and therefore the rejection of claim 8 applies to claim 1.

Art Unit: 2181

Referring to claim 3, Huang et al. disclose said method of claim 1, wherein said first resistor is configured as a pull-up resistor (pull-up resistor 340 of Fig. 3).

Referring to claim 4, Huang et al. disclose said method of claim 3, further comprising detecting said switching of said biasing voltage (See col. 6, lines 30-35).

Referring to claim 5, Huang et al. disclose said method of claim 4, further comprising determining a logically detached state responsive to said detecting (See col. 6, lines 28-30).

Referring to claim 6, Huang et al. disclose said method of claim 1, wherein said detach control signal is responsive to a wake-up signal (transferred signals between a non-PnP interface and a USB interface; See col. 3, lines 17-20).

Referring to claim 9, Huang et al. disclose said apparatus of claim 8, wherein said switch may apply said bias voltage to said first end of said first resistor responsively to a detach control signal (switch controlling signal from converting circuit 310 in Fig. 3) on said detach control signal wire (See col.6, lines 23-27).

Referring to claim 10, Huang et al. disclose said apparatus of claim 9, wherein said detach control signal is generated responsively to a wake-up signal (transferred signals between a non-PnP interface and a USB interface; See col. 3, lines 17-20).

Referring to claim 11, Huang et al. disclose said apparatus of claim 8, wherein said data bus wire carries universal serial bus data (USB interface D+ of Fig. 3).

Referring to claim 15, Huang et al. disclose an apparatus, comprising: means for providing a first resistor with a first end and a second end (pull-up resistor 340 of Fig. 3) coupled to a switch (switch 330 of Fig. 3) and said second end coupled to a data bus wire (USB interface D+ of Fig. 3); means for controlling said switch with a detach control signal (switch controlling signal from converting circuit 310 in Fig. 3); and means for switching a biasing voltage from said resistor utilizing said switch (See col. 6, lines 23-27).

Art Unit: 2181

Since the claim rejection Claim Objection about claims 17 and 18, the preambles of the claims are substituted by "The apparatus of claim 15".

Referring to claim 17, Huang et al. disclose said apparatus of claim 15, further comprising means for detecting said switching of said biasing voltage (See col. 6, lines 30-35).

Referring to claim 18, Huang et al. disclose said apparatus of claim 15, wherein said detach control signal is generated responsively to a wake-up signal (converted signal from the signals transferred between non-PnP interface and USB interface; See col. 3, lines 17-20).

Referring to claim 7, Huang et al. disclose said method of claim 6, wherein said detach control signal (i.e., switch controlling signal) is asserted (i.e., state of switch controlling signal which causes switch 330 to be closed) when said wake-up signal (i.e., converted signal from the signals transferred between non-PnP interface and USB interface) is de-asserted (i.e., state of the converted signal which ultimately causes switch 330 to be closed).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. [USPN 6,131,134] in view of Decuir [USPN 5,781,028].

Huang et al. disclose all the limitations of claim 12 except said data bus wire carries IEEE-1394 bus data. Decuir teaches a conventional bi-directional transmission line using an IEEE 1394 standard (Fig. 4), wherein said data bus wire (transmission line 51 of Fig. 4) carries IEEE-1394 bus data (See col. 2, lines 23-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2181

invention was made to have applied said data bus wire, as disclosed by Decuir, to said data bus wire of said apparatus, as disclosed by Huang et al., for the advantage of a high speed of data transmission.

14. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. [USPN 6,131,134] in view of Takasu [JP 407,058,800 A].

Referring to claim 13, Huang et al. disclose all the limitations of claim 13 except that do not teach a second resistor with a first end and a second end. Takasu teaches a second resistor (terminating register  $R_2$  of Fig. 1) with a first end and a second end, said first end coupled to said data bus wire (transmission line 9 of Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said second resistor, as disclosed by Takasu, in said apparatus, as disclosed by Huang et al., so as to provide effective termination on the bus.

Referring to claim 14, Takasu discloses said second end of said second resistor is coupled to signal ground ( $R_2$  of Fig. 1 as a pull-down resistor; See col. 4, lines 30-31).

### *Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

St. Pierre, Jr. et al. [USPN 6,351,809 B1] disclose method of disguising a USB port connection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter S. Wong can be reached on 703-305-3477. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3718 for regular communications and 703-746-9248 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.




Application/Control Number: 09/540,676

Page 8

Art Unit: 2181

Christopher E. Lee  
Examiner  
Art Unit 2181

cel/ *CEL*  
June 17, 2002

  
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